EXTREME HYPEREXIA AND PROLONGED CONVULSION

ACCOMPANYING HEAT STROKE: COMPLETE RECOVERY

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PATIENT, V. S., Mexican, age 43, is a common laborer, and was piling lumber all day on August 2, 1938. The weather was exceptionally warm, temperature rising above 105 degrees in the shade. At 4:30 p. m. he suggested quitting work, sat down to rest, and that is the last he remembered. Coworkers stated that he became delirious and uncontrollable, and it required four men to hold him. He was taken to an emergency station in the lumber camp.

One of us was called by the male nurse at the station, who stated that the patient was having a continual convulsion and his axillary temperature was 110 degrees; breathing was labored and his pulse was feeble and weak. Morphin sulphate, one-fourth grain, was given by hypodermic.

When we arrived the patient was comatose and having a generalized convulsion, which had persisted for one and one-half hours. His skin was dry and hot. Axillary temperature was above the limits of the thermometer, which was 110 degrees. His eyes were opened and fixed, pupils were pinpoint in size, and did not react to light. It was impossible to obtain a radial pulse; breathing was shallow and irregular, and he displayed all the signs of impending death. A tentative diagnosis of heat stroke, with disturbance of the heat-regulating mechanism was made, and symptomatic treatment begun. Ice pack to his head and a cold sponge were given, and 1000 cubic centimeters of normal saline was started intravenously. Then 3¾ grains of sodium amytal were given intravenously, which completely relaxed the convulsion. Two cubic centimeters of coramin, 7½ grains of caffein, and 5 cubic centimeters of metrazol were administered intravenously. Following the normal saline, 1000 cubic centimeters of 5 per cent dextrose in normal saline was given.

One hour after treatment was started, the patient's pulse was of fair quality—96 per minute. The temperature dropped to 103.8, and his blood pressure was 72 systolic; breathing was regular. The patient remained relaxed, but on manipulating his arms a slight generalized convulsion began. Three grains of sodium luminal were given intramuscularly. His condition remained fair, and he was moved by ambulance for twenty-six miles to a hospital. On arrival at the hospital, 1000 cubic centimeters of 10 per cent dextrose in normal saline were given intravenously.

August 3, 1938.

The following morning the patient attempted to get out of bed. He was incontinent, both from bladder and bowels. He would arouse to strong stimuli, but would not respond. He appeared dazed. The temperature was 99.2. A spinal tap was done; spinal fluid was not under increased pressure, and there were no cells found. Red blood cells, 5.14 million; hemoglobin, 80 per cent; white blood cells, 16,800, with 88 per cent polymorphonuclears. Urine showed: specific gravity 1.012, a trace of albumin, an occasional granular cast, and a moderate number of spermatozoa. His deep reflexes were absent. He progressed rapidly, and took nourishment later in the day.

August 4, 1938.

The morning of the second day the patient's temperature was normal. He vomited once, vomitus containing bits of tomato and green peppers, eaten at the noon meal before his illness. The patient was rational, and gave a history of events before that time. Past medical history was entirely negative. No apparent memory loss. Only complaints at this time were: aching in all his muscles, and weakness. Non-protein nitrogen was 26.3 milligrams per 100 cubic centimeters of blood serum. Blood Wassermann and spinal Wassermann were reported negative.

August 5, 1938.

The third day the patient felt nauseated, so nothing was given by mouth, and that day he had three intravenous injections of 1000 cubic centimeters of 5 per cent dextrose in normal saline. His mind was perfectly clear, and a complete neurological examination was normal. His only complaint was a feeling of weakness. Temperature was 99 degrees, pulse 102, and blood pressure 122 systolic and 70 diastolic.

Following this the patient made an uneventful recovery, and was discharged from the hospital on August 10, 1938. At this time there was no evidence of any residual damage to the brain, and complete physical examination was negative. The patient was told to return to his previous job, but to do only light work for a week or so, and at no time become overheated.

October 15, 1938.

The patient was seen at this time for routine check-up. Apparently, he has fully recovered and has no residual damage or ill effects from his illness.

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ACTINOMYCOSIS WITH SUBSEQUENT EXTENSION AND ABSCESS FORMATION

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INFECTION of the human body by actinomyces is relatively common. The original portal of entry is probably the mouth. Naeslum has been able to isolate the aerobic, anaerobic, and combined forms from the normal mouth. Lord and Trevett were able to obtain the organism from dental scum or the contents of carious teeth. The buccal cavity being the portal of entry, vaginal invasion probably comes from the rectum via sanitary pad, toilet

tissue, etc. The organism has been found in the uterus, tubes, and ovaries.

REPORT OF CASE

Mrs. D. M., age 49, was first seen by one of us on May 11, 1937. At that time she complained of a painful swelling in her back in the region of the sacrum. This had first appeared in October, 1936, accompanied by practically no pain and little febrile reaction. This original swelling had persisted about two months, and then disappeared almost completely. It reappeared about four months later and gradually extended outward over the right hip. One week before being seen the lesion pointed on the lateral surface of the right ilium. About 500 cubic centimeters of purulent material had drained from the lesion. Past history showed that some swelling and tenderness had occurred in the right inguinal glands a few months prior to the time the swelling appeared in the back.

Physical examination showed a moderately well nourished female. No pathology was found in the head, neck, or chest. All the teeth had been removed. No abdominal tenderness was present nor were any masses palpable. Examination of the area referred to previously showed a sinus opening over the lateral surface of the right iliac crest with a line of induration running backward to the lumbosacral area. Pelvic examination showed the viscera to be normal in size and position. No tenderness was present. Smears from the vagina were positive for actinomyces. This was verified by the clinical laboratory. X-rays of the pelvis revealed an old ankylosed arthritis, involving the third, fourth, and fifth lumbar vertebrae and upper sacrum, apparently nonactive at the present time. Laboratory examination showed the following: white blood cells, 13,000; small lymphocytes, 16 per cent; monocytes, 5 per cent; eosinophils, 2 per cent; neutrophils, 77 per cent, of which 5 per cent were stabs; red blood cells, 4,480,000; hemoglobin, 75 per cent. Blood Wassermann was negative. Urinalysis showed only a trace of albumin.

A working diagnosis was made: "Deep abscess, etiology undetermined."

Treatment.—On June 17, 1937, the patient was taken to surgery and, under a general anesthetic, the abscess was opened and explored. The abscess and accompanying sinus tract extended from a point above the anterior crest of the right ilium back to the lumbar spine. There was no evidence of bone involvement. Many ramifications were present, some of which extended down to, but not through the peritoneum. Cultures were taken and sent to the laboratory. The tract was cleaned and packed with vaselin gauze.

Recovery from the operation was uneventful. The laboratory report on the smears was positive for actinomycotic granules. Postoperative treatment consisted of packing the tract regularly with vaselin gauze and exposing the unhealed areas to ultra-violet rays. Potassium iodid was given during the entire convalescence, the dosage being maintained at maximum tolerance. Because of the depth of the tract and the nature of the causative agent, healing was of necessity slow. On June 20, 1938, the patient was discharged, completely cured.

COMMENT

Apparently, the focus of the infection was the vagina, with extension to the inguinal glands and then the back. The causative organism we believe to be actinomyces.

IN CONCLUSION

We feel that this case is of interest for the following reasons: First, the actinomycotic infection apparently extended from the vagina through the inguinal glands, forming the sinus tract that ultimately resulted in abscess formation. Second, complete healing of these deeply infected areas is unusual—so often we find sinus tracts remaining. Third, we feel that we were definitely able to determine the original location of the causative agent.

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CHANCROIDAL BUBO CURED BY SULFANILAMIDE

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MR. M. H., age 22, noted a "sore" on the glans penis about one week after intercourse. He came under my observation about four days later, at which time there was an ulcerated lesion completely destroying the frenulum, and extending into the superficial tissues of the glans penis. The inguinal glands were slightly enlarged. Darkfield examination for Spirocheta pallida was negative. Under treatment with mild antiseptic washes and dressings, the lesions healed very slowly. Two months later, with the lesions still not completely healed, the patient developed large inguinal buboes on the left side. The swelling was the size of a lemon, and there was redness of the skin around the area for a distance of about three inches. The swelling was hard and moderately tender. The patient's temperature was normal, but he felt sick.

Sulfanilamide was administered orally, 20 grains every four hours for four doses, and 10 grains four times daily, to a total of 250 grains. Within twenty-four hours the patient felt considerably better, and recession of the swelling was quite noticeable. At the end of five days the ulcer was entirely healed, and the glands were no larger than small walnuts. They continued to recede. There has been no recurrence.

In this case an ulcerated chancroid, which healed very slowly and developed buboes after two months, responded after the administration of sulfanilamide.

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TRICHINA SPIRALIS: ITS INCIDENCE IN NECROPSY MATERIAL*

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ROUTINE examinations of human postmortem material for the presence of Trichina spiralis have yielded interesting information regarding the incidence of trichinosis. Percentages of infestation, ranging from 3.5 to 27.6, have been reported from widely separated localities. When it is realized that one-third to one-half of these patients probably have had clinical symptoms of the disease, a morbidity figure is obtained that is not only startling, but extremely important to the clinician and public health officials. In the papers of Queen,[1] Hall and Collins,[2] Riley and Scheifley,[3] Hinman,[4] McNaught

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1 Queen, F. B.: The Prevalence of Human Infection with Trichinella Spiralis, J. Parasitol. 18:128 (Dec.), 1931.

2 Hall, M. C., and Collins, B. J.: I. The Incidence of Trichinosis as Indicated by Postmortem Examinations of Three Hundred Diaphragms, Pub. Health Rep., Vol. 52, No. 16 (April), 1937. II. Some Correlations and Implications in Connection with the Incidence of Trichinae Found in Three Hundred Diaphragms, Pub. Health Rep., Vol. 52, No. 17 (April), 1937.

3 Riley, W. A., and Scheifley, C. H., Trichinosis of Man—A Common Infection, J. A. M. A., 102:1217 (April 14), 1934.

4 Hinman, E. H.: Trichiniasis in Louisiana, New Orleans M. and S. J., 88:445-448 (Jan.), 1936.